REMARKS

Claims 1-5, 7-14 and 36-49 are pending in this present application. Claims 15-35 are withdrawn from consideration as being drawn to a non-elected invention.

Reconsideration of the application is respectfully requested in view of the following responsive remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

In the Office Action dated November 24, 2008, the following actions were taken:

- (1) claims 1-5 and 7-13 and 49 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,849,149 (hereinafter "Otaki") in view of U.S. Patent No. 4,893,877 (hereinafter "Coates") and U.S. Patent No. 4,378,392 (hereinafter "Segel");
- (2) claim 14 was rejected under 35 U.S.C. 103(a) as being unpatentable over Otaki in view of Coates; and
- (3) claims 36-48 were rejected under 35 U.S.C. 103(a) as being unpatentable over Otaki in view of Coates.

Applicant submits that the presently pending claims are allowable and respectfully requests that the presently pending claims be examined and allowed.

Rejections under 35 U.S.C. §103(a)

Claims 1-5, 7-13, and 49

The Examiner rejected claims 1-5, 7-13 and 49 under 35 U.S.C. 103(a) as being unpatentable over Otaki in view of Coates and Segel. In response to this rejection, Applicant submits that a prima facie case of obviousness has not been presented for these claims, as the references do not teach each and every element of the claims. Of this particular set of claims, Claim 1 is independent and the remaining claims all depend from and are narrower in scope than Claim 1. Accordingly, Applicant directs the following remarks to Claim 1 and any and all claims depending there from.

Independent Claim 1 requires a durable printed composite material as set forth above wherein a printable layer has a viewing surface and a <u>printed surface</u>, wherein an image is printed on the printed surface, said printable layer comprising a transparent or translucent material, <u>said printable layer including an ink-receiving layer</u> (Emphasis added). Claim 1 further requires that at least one of the layers, i.e., the printable layer, includes an additive configured for one of light stabilization, liquid resistance, or vapor resistance.

The Examiner alleges that the transparent film and the information of Otaki meet the printable layer of claim 1, but also acknowledges that Otaki does not teach a light stabilizer in any of the claimed layers. The Examiner, however, alleges that Segel teaches a laminate including an adhesive layer wherein the adhesive layer comprises UV stabilizers, and therefore, it would have been obvious to combine the UV stabilizer containing adhesive layer of Segal with the invention of Otaki.

Respectfully, Applicant disagrees with the Examiner on this point. Segel teaches a transparent laminate to extend the life of photographs (Abstract). The transparent laminate of Segel "comprises a laminate made of transparent film of ultra-violet-stabilized polyethylene terephthalate or ultraviolet-stabilized acrylonitrile and a transparent silicone or acrylic adhesive bonded to the film, the laminate being adapted to be bonded to the image surface of a photograph by the adhesive." (Abstract). Segel does not teach or suggest a printable layer including an ink receiving layer as required by claim 1. The layer taught by Segel is not configured to be printed upon, is printless, and does not comprise an ink receiving layer. In fact, Segel specifically teaches away from a printable layer. This is due to the fact that the laminate of Segel is expressly configured to "extend the life of photographs and prevent them from gradual deterioration" (Abstract). The laminate of Segel is always transparent so that the photograph (which has the printing on it) can be viewed through the protective laminate. In other words, the printing is not on the laminate, it is on the underlying substrate and is merely protected by the laminate.

In fact, Segel expressly teaches that the characteristics required for the adhesive portion of the laminate include that "it be <u>transparent</u>" (col. 5, lines 14-16). Likewise, Segel expressly requires that film comprising the laminate also "must be transparent" (col. 5, lines 67-68). The transparent laminate of Segel cannot be printable because if it

were printed upon, it would not be transparent, and therefore would hide portions of, or alter the underlying photograph it is designed to cover and protect.

Even if Segel teaches a laminate comprising UV stabilizers, the combination of Segel and Otaki nevertheless does not teach each and every element of claim 1 of the present application. Specifically, neither Otaki nor Segel, nor the combination thereof, teaches a printable layer including an ink-receiving layer, the printable layer including an additive configured for one of light stabilization, liquid resistance, or vapor resistance. As neither Otaki nor Segel teach each and every element either alone or in combination, nor any of the rejected dependent claims related to claim 1, withdrawal of this rejection is requested.

Claim 14

The Examiner rejected claim 14 under 35 U.S.C. 103(a) as being unpatentable over Otaki in view of Coates. In response, Applicant submits that a prima facie case of obviousness has not been presented for claim 14 for lack of teaching of each and every element of the claim. Claim 14, as apparent in the claim language, requires a metallic foil layer being visible through at least a portion of said printable layer. Specifically, neither Otaki nor Coates teach a metallic foil. A metallic foil, as commonly known, is an independent, thin sheet of self-supporting metal that is separate and distinct from the other layers (Application page 7, lines 17-18). Claim 14 specifically claims a metallic foil layer. Foils should not be confused with metallic layers that are deposited on substrates, and which are not independent or self-supporting.

Otaki teaches only a hologram, and therefore, does not teach a metallic foil.

Coates teaches metallic holograms comprising a thin layer of metal, which is always formed and mounted on a substrate (Abstract). Unlike the claimed foil, the metallic layer of Coates is necessarily very thin and is fabricated or deposited on a die or substrate which is then used for transferring purposes (See col. 2. lines 6-11). The methods of Coates, such as vacuum metallization, sputtering and vacuum depositing the thin layer of metal, would not create a foil (col. 2, lines 6-7, 15-17, and 27-29). The metal layers of Coates are not layers of foil, i.e., independent of the other layers and self-supporting

metal, but rather are <u>always formed</u> and mounted on a substrate (Abstract, and col. 2, lines 8-10, 18-22, and 29-31).

The Examiner argues that there is nothing in Coates that suggests that the metal layer of Coates is not self-supporting after it has been formed. The Examiner further argues that because Applicant points out that methods such as sputtering and vacuum depositing the layer of metal do not form a foil, Applicant's argument is allegedly based on a process limitation. Respectfully, Applicant disagrees with the Examiner on these points. The fact that the metal layer of Coates is always formed and mounted on a substrate is evidence that it is not independent from the substrate and is also evidence that it is either too thin or not cohesive enough to support itself, and thereby does not qualify as a metallic foil. Moreover, the fact that the deposited metal layer of Coates may be discontinuous, further establishes that the metal layer of Coates is not a foil (col. 2, lines 18 and 19). In addition, Coates expressly teaches extreme thinness of the metal hologram, and even states that:

"[T]his thinness is necessary... because the metal surface which was not in contact with the die surface will ultimately be the reflective holographic surface; and if the metal is much thicker, it will not adequately reproduce the detailed topology of the holographic master from which the die was fabricated." (col. 2, lines 42-49).

Contrary to the Examiner's position, Applicant's argument is not based solely on a process limitation, but rather is based on a structural limitation. The process limitation referred to by the Examiner is simply evidence that the structural limitations exists. The facts discussed above do show that the metallic layer of Coates is not self-supporting after it has been formed. The Examiner argues that Coates is combined with Otaki to teach the use of a metallic hologram layer and not to teach the thickness of the hologram layer. Regardless of the purpose in combination, neither Coates nor Otaki teach a metallic foil. To reiterate, a metal foil is a layer that is independent and self-supporting. The structure, procedures and methods taught in Coates necessarily prevent a metal or holographic layer that is either independent or self-supporting. As such, Coates does not teach a metal foil.

As neither Coates nor Otaki teach a metallic foil layer, they do not teach each and every element either alone or in combination. Therefore, withdrawal of the rejection is requested.

Claims 36-48

The Examiner rejected claims 36-48 under 35 U.S.C. 103(a) as being unpatentable over Otaki in view of Coates. In response, Applicant submits that a *prima facie* case of obviousness has not been presented for claims 36-48 for lack of teaching each and every element of the claim. Specifically, neither Otaki nor Coates teaches an <u>image-free metallic layer</u>, as is required in independent claim 36. In fact, Otaki does not even teach a metal hologram, as is acknowledged by the Examiner on Page 7 of the March 18, 2008 Office Action. Accordingly, without a metal hologram, Otaki cannot possibly have an <u>image free metallic layer</u>.

Coates does not make up for this deficiency. The Examiner alleges that the metallic layer of Coates is not imaged or embossed at all times. In response, Applicant submits that Coates does teach a metallic layer, but the metallic layer of Coates is always a metallic hologram. A hologram is generally known and accepted as a type of image, and thus by its very nature a metallic hologram comprises an image. Moreover, Coates expressly teaches an image replicated into a metallic film (col. 1, lines 31-32). Therefore, the metallic layer of Coates is not image-free.

In support of his argument that the metallic layer of Coates is image-free at times, the Examiner references col. 2, lines 5-15 of Coates, which describe one method of fabricating the metal hologram. The method described is that of vacuum depositing a metal layer directly on the die. Despite the Examiner's allegation that there is a point during this process whereat the metallic layer is not imaged or embossed, this physically cannot be the case in view of the following considerations.

Coates expressly teaches in the summary and detailed description (col. 1, line 55-col. 2, line 4) that the metallic reflecting hologram is prepared by use of a die having a holographic image formed in the embossing surface thereof. In all embodiments taught in Coates, the die used in connection with preparing the metallic reflecting hologram comprises an image thereon. The image is the result of a "pattern of raised areas and

valleys which are a holograph of the object being holographed" (col. 1, lines 67-68). Thus, the die comprises an image thereon. At the moment that the metal layer is applied to the die, which occurs via vacuum deposition in the embodiment cited by the Examiner, the metal layer takes the holographic image of the die. As such, Coates does not teach any embodiment wherein the metallic layer is not imaged or embossed.

The Examiner argues that in Coates, there is an embodiment disclosed in col. 2, lines 5-15 wherein both image formation and embossing on the metallic layer are absent, and therefore, at least in this embodiment the metallic layer of Coates is not imaged or embossed. Respectfully, Applicant disagrees with the Examiner on this point since the die required in this embodiment comprises an image theron prior to depositing the metal onto the die (col. 2, lines 5). The image on the die is the result of a pattern of raised areas and valleys (col. 1, lines 66-68). At the moment the metal is vacuum deposited onto the die, the metal layer assumes the pattern of raised areas and valleys on the die, thereby at least partially taking the holographic image of the die. Accordingly, the metal layer of Coates is never image-free.

As neither Coates nor Otaki teach an image-free metallic layer, they do not teach each and every element either alone or in combination. Therefore, withdrawal of the rejection is requested.

CONCLUSION

It is respectfully submitted that the rejections of the presently pending claims be reconsidered and withdrawn and that all claims be allowed. In view of the foregoing, Applicants believe that claims 1-5, 7-14 and 36-49 present allowable subject matter and allowance is respectfully requested.

Please charge any additional fees except for Issue Fee or credit any overpayment to Deposit Account No. 08-2025

Dated this 24th day of February, 2009.

Respectfully submitted.

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